

Life Science Exam

Matching: Match the terms in Column A with the answers in Column B. Put the letter of the correct answer in the space provided.

Column A

1. inhaling
2. exhaling
3. diaphragm
4. cilia
5. mucous membrane
6. wind pipe
7. epiglottis
8. bronchi
9. bronchioles
10. alveoli
11. plasma
12. white blood cells
13. platelets
14. hemoglobin
15. kidneys
16. colon
17. epidermis
18. lungs
19. skin
20. dermis
21. urethra
22. pores
23. ureter
24. perspiration
25. sebaceous gland

Column B

1. ☒ Breathing in
2. ☒ Oil gland
3. ☒ Filter air
4. ☒ Liquid wastes which leave the body through pores.
5. ☒ Two branches from lower end of trachea
6. ☒ Breathing out
7. ☒ Air sacs
8. ☒ Smaller branches of the bronchi
9. ☒ Warms and moistens air
10. ☒ Stops food from entering the trachea
11. ☒ A smooth muscle which changes the air pressure in the chest cavity.
12. ☒ Fight infection & destroy bacteria
13. ☒ Red protein (iron compound) that attracts oxygen.
14. ☒ Liquid part of the blood
15. ☒ Helps blood to clot
16. ☒ Openings in the skin
17. ☒ Tubes leading from the kidneys to the urinary bladder.
18. ☒ Removes solid wastes
19. ☒ Leads liquid wastes from the bladder to the outside
20. ☒ Two organs that remove most liquid wastes.
21. ☒ Helps protect inner layer of skin
22. ☒ Remove waste CO_2 & H_2O
23. ☒ Excretes small amounts

See page 2 for answers Column B questions

Name: Alexander Zogysone

- of water, salt & protein wastes
- X The thicker, lower layer of skin
- X Trachea

In the blank space provided, write the word that best completes the sentence. 2pts

When air enters your lungs, the pressure in your chest cavity is greater than the air pressure outside the body.

Your nostrils are lined with hair-like projections called cilia.
When you exhale, the pressure in your chest cavity is smaller than the air pressure outside your body.

The life activity that releases energy is exercise.

The tiny blood vessels that surround the alveoli are called capillaries.

Tubes which take liquid wastes from the kidneys to the bladder are the ureter.

The urinary bladder stores liquid wastes until they are ready to leave the body.

The urethra is the tube that leads from the urinary bladder to the outside.

Name four structures found in the dermis.

- | | |
|----------------------------|--------------------------|
| a. <u>capillaries</u> | b. <u>hair follicles</u> |
| c. <u>sebaceous glands</u> | d. <u>arteries</u> |
| e. <u>veins</u> | |

Name the four organs of waste excretion in the human body.

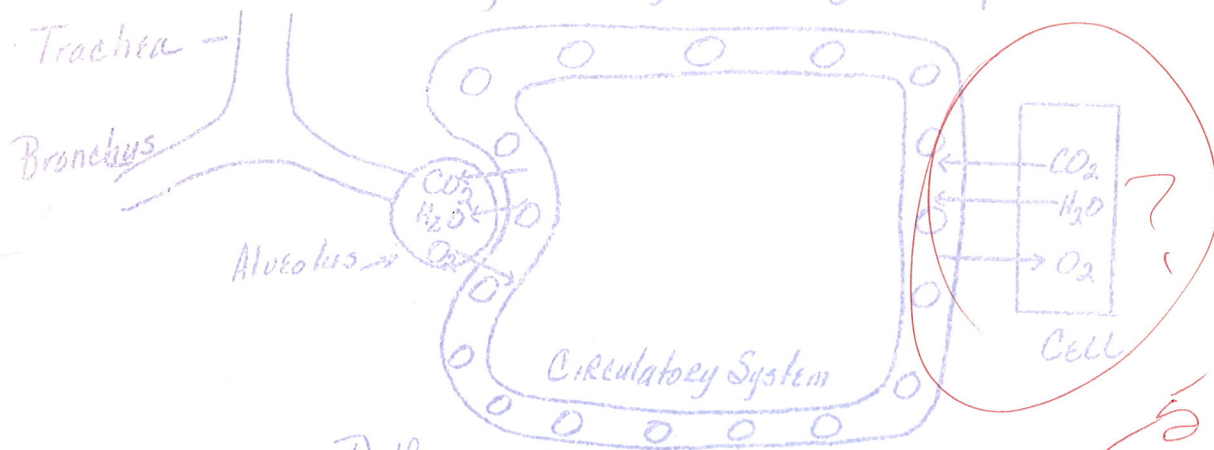
- | | |
|-----------------|-------------------|
| f. <u>colon</u> | g. <u>kidneys</u> |
| h. <u>skin</u> | i. <u>lungs</u> |

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3 ID #3 1 & 2

Name: Alexander Szygma

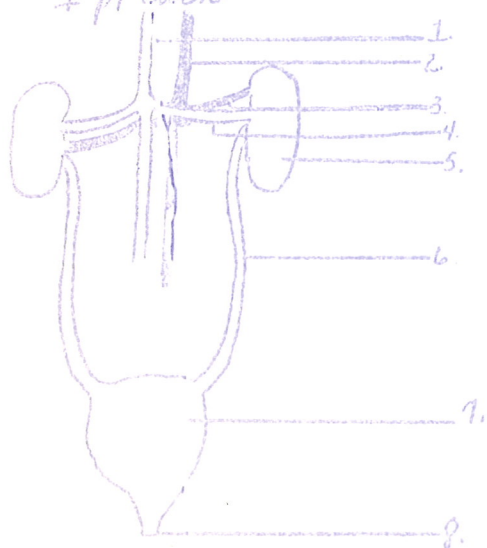
Look at this diagram very carefully. 10 pts



Pathway of the gases in respiration
Explain the process in the above diagram

Oxygen is inhaled and taken into alveoli, which transfers the O_2 to the blood. The alveoli take CO_2 and H_2O out of the blood, and it goes through the trachea, and out of the body.

1 pt each



5

- | | |
|-----------------------|--------------------|
| 1. Aorta | 6. ureter |
| 2. Superior vena cava | 7. urinary bladder |
| 3. Renal vein | 8. urethra |
| 4. Renal artery | 9. epidermis |
| 5. Kidney | 10. dermis |

Name: Alexander Gigopone

Multiple Choice: Place the correct letter in the blank.

ID #'s 1 & 2 Must answer any five (5). ID #'s 3 & 4
MUST ANSWER seven (7). 2 pts. each

1. _____ The exchange of gases in human lungs takes place at the
(a) trachea (b) bronchi (c) diaphragm (d) alveoli
2. A As blood passes through the lungs, gases are exchanged
through blood vessels called (a) capillaries (b) arteries
(c) arterioles (d) veins
3. A During inhalation, the diaphragm is (a) lowered (b) raised
(c) stationary (d) lowered and then raised
4. A All of the following diffuse from blood into the kidney
tubules of man except (a) red blood cells (b) urea
(c) glucose (d) amino acids
5. _____ The process that releases energy from digested food is
(a) breathing (b) inhalation (c) respiration (d) exhalation
6. A The structures in the nasal cavity which filter inhaled
air are (a) cilia (b) villi (c) alveoli (d) Bowman's capsules
7. _____ From your nose, air passes to the throat cavity or
(a) larynx (b) pharynx (c) colon (d) epiglottis
8. _____ The human body excretes water in the following way(s)
(a) Skin and Kidney functions only. b. Skin, Kidneys and colon functions
(c) Lungs, Kidneys and Skin functions (d) Kidneys only.
9. A Nitrogenous wastes are formed as a result of the break
down of (a) proteins (b) hemoglobin (c) glucose
(d) fats

(SMART MOVE) (ha, ha)

All A's!!

HS 239

Date November 16, 1988

Name

Alexander Zozzore

I.D. 1

Science Exam

Multiple Choice - Place the correct letter in the blank

- B The digestive juice produced in the liver is (a) saliva (b) bile (c) pancreatic juice (d) urine
- C The inner wall of the small intestine has millions of tiny small folds which create a large area through which absorption can occur. These folds are called (a) bile (b) ducts (c) villi (d) mucus layers.
- B Starch digestion begins & food is lubricated as a result of (a) capillaries and mucous gland cells (b) saliva and mucus (c) pepsin and hydrochloric acid (d) fats being changed to fatty acids & glycerol
- C Carbohydrates are (a) all starches & proteins (b) all sugars & proteins (c) starches & sugars (d) none of these
- D In the stomach (a) protein digestion begins (b) minerals are dissolved (c) bacteria are killed (d) all of these things occur
- C The fluid that helps in breaking down fats into tiny packets is (a) the gall bladder (b) pancreatic fluid (c) intestinal fluid (d) bile
- A Which digestive fluid is produced by the liver & stored in the gall bladder? (a) bile (b) hydrochloric acid (c) amino acids (d) none of these
- A From the right ventricle, blood flows through the (a) pulmonary artery (b) pulmonary veins (c) aorta (d) inferior vena cava
- A The aorta (a) distributes blood to all parts of the body (b) distributes blood to the superior vena cava (c) connects arteries to veins (d) the largest vein in the body

Name: Alexander Lopez

c The extensive circulation which includes all of the arteries that branch from the aorta, the capillaries that penetrate the body tissues is (a) coronary circulation (b) pulmonary circulation (c) systemic circulation (d) renal circulation

Short Answer

Trace the path of a drop of blood from the largest veins to all parts of the body. Superior & inferior vena cava → Right atrium → Right ventricle → Pulmonary artery → lungs → Pulmonary vein → Left atrium → Left ventricle → aorta → All body parts

The top chambers of the heart are ~~atria~~ atria

The bottom chambers of the heart are ventricles

Give four (4) characteristics of veins.

Carry deoxygenated blood (generally)

Have valves to stop backflow

Carry blood to the heart

Have walls thinner than arteries & small capillaries and smaller than arteries

Give four (4) characteristics of arteries

Carry oxygenated blood, (generally)

Have the most pressure

Carry blood from the heart

Have no valves.

Give two (2) characteristics of capillaries

One-cell thick walls

Get food & O₂ out & wastes & CO₂ in.

Why is the wall of the left ventricle thicker than any other heart chamber? So the blood can be pumped with enough power to go around the whole body.

Why can you feel the pulse of an artery and not a vein?

Arteries contract & release - and flex - and that's what you feel,

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Modified True - False: If the statement is true, place a T in the blank on your left. If the statement is false, make it true by writing the correct word in the blank on your left. The correct word should replace the underlined word in the statement. Under no circumstances should the letter F or the word false be written.

T The blood consists of a liquid portion, or plasma and the blood cells, or solid components.

red blood cells Another term for erythrocytes is white blood cells.

T Thrombocytes are disk shaped, contain hemoglobin and are produced in such bones as the ribs, vertebrae, skull.

T Mature red blood cells have no nuclei.

T Platelets have nuclei, are nearly colorless and some are capable of amoeboid movement.

T Plasma is responsible for blood clotting. Capillaries are the narrowest & thinnest blood vessels.

T Digested foods are present in plasma in the form of glucose, fatty acids & glycerol and amino acids.

white blood cells Red blood cells collect in the area of an infection and destroy bacteria.

Arteries Capillaries have thick, muscular elastic walls that expand & contract.

Write the parts of the heart on the following lines.

1. Superior vena cava
2. Right atrium
3. Inferior vena cava
4. Right ventricle
5. Aorta
6. Pulmonary artery
7. Pulmonary vein
8. Left atrium
9. Left ventricle
10. Aorta

Alexander Goeyen

